



United States Department of Agriculture
National Agricultural Statistics Service

Minnesota Ag News – Chemical Use Vegetables: 2018



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Green Peas, Chemical Use – Minnesota: 2018

[Includes acreage for fresh market and processing.]

Active ingredient	Area applied (percent)	Applications (number)	Rate per application (pounds per acre)	Rate per crop year	Total applied (1,000 pounds)
Fertilizer					
Nitrogen.....	66	1.1	41	45	1,523
Phosphate.....	41	1.0	42	42	891
Potash.....	48	1.0	80	80	2,006
Sulfur.....	18	1.0	9	9	87
Herbicides					
Imazethapyr.....	21	1.1	0.050	0.056	0.6
Imazethapyr, ammon.....	27	1.0	0.037	0.037	0.5
MCPB.....	10	1.0	0.575	0.575	3.1
Pendimethalin.....	65	1.0	0.648	0.666	22.6
Saflufenacil.....	34	1.2	0.020	0.023	0.4
Trifluralin.....	2	1.0	0.488	0.488	0.4
Total herbicides	89				33.2
Insecticides					
Bifenthrin	12	1.1	0.063	0.068	0.4
Total insecticides	12				0.6

Sweet Corn, Chemical Use – Minnesota: 2018

[Includes acreage for fresh market and processing.]

Active ingredient	Area applied (percent)	Applications (number)	Rate per application (pounds per acre)	Rate per crop year	Total applied (1,000 pounds)
Fertilizer					
Nitrogen.....	97	1.7	69	115	12,720
Phosphate.....	69	1.1	46	50	3,942
Potash.....	59	1.0	76	78	5,294
Sulfur.....	26	1.1	13	14	416
Fungicides					
Azoxystrobin	57	1.2	0.096	0.115	7.5
Propiconazole	50	1.1	0.096	0.107	6.1
Total	59				14.0
Herbicides					
Acetochlor.....	19	1.0	1.399	1.453	31.2
Atrazine	58	1.2	0.505	0.585	39.1
Bicyclopyrone	1	1.0	0.029	0.029	(Z)
Clopyralid mono salt	3	1.1	0.088	0.101	0.3
Dimethenamid-P	42	1.0	0.782	0.808	38.8
Glyphosate pot. salt	4	1.0	1.175	1.175	5.3
Mesotrione	4	1.0	0.102	0.102	0.4
S-Metolachlor.....	14	1.0	1.548	1.548	25.6
Tembotrione.....	58	1.0	0.079	0.082	5.4
Topramezone.....	7	1.2	0.018	0.022	0.2
Total	94				151.4
Insecticides					
Bifenthrin	77	2.1	0.047	0.098	8.7
Lambda-cyhalothrin	50	2.0	0.019	0.040	2.3
Total	81				11.1

Vegetables, All, Pest Management Practices – Minnesota and Program States: 2016 and 2018

	Minnesota		Program States	
	2016	2018	2016 ¹	2018 ²
	(percent of operations)			
Avoidance Practices				
Crop or plant variety chosen for specific pest resistance.....	2	9	44	37
Planting locations planned to avoid cross infestation of pests.....	8	9	33	32
Planting or harvesting dates adjusted.....	3	6	19	18
Rotated crops during past 3 years	57	80	77	80
Row spacing, plant density, or row directions adjusted	3	3	21	22
Monitoring Practices				
Diagnostic laboratory services used for pest detection via soil or plant tissue analysis	27	(Z)	24	16
Field mapping data used to assist decisions.....	49	21	22	13
Scouted.....				
-established process used.....	80	47	43	28
-for pests due to a pest advisory warning	7	7	20	12
-for pests due to a pest development model	56	21	25	13
-for pests or beneficial organism by conducting general observations while performing routine tasks.....	(Z)	16	18	25
-for pests or beneficial organism by deliberately going to the crop acres or growing areas	100	83	79	72
Scouted for diseases.....	99	98	94	95
-by employee	0	0	4	3
-by farm supply company or chemical dealer.....	2	1	5	4
-by independent crop consultant or commercial scout	4	1	11	5
-by operator, partner, or family member	2	4	62	73
-by processor	91	95	18	14
Scouted for insects & mites	100	99	95	96
-by employee	0	0	4	3
-by farm supply company or chemical dealer.....	2	1	5	4
-by independent crop consultant or commercial scout	4	1	10	5
-by operator, partner, or family member	3	4	62	73
-by processor	91	95	17	14
Scouted for weeds.....	99	97	90	95
-by employee	(Z)	(Z)	5	4
-by farm supply company or chemical dealer.....	4	9	5	4
-by independent crop consultant or commercial scout	5	1	9	4
-by operator, partner, employee, or family member	27	35	67	78
-by processor	64	55	13	9
Weather data used to assist decisions.....	95	74	70	68
Written or electronic records kept to track pest activity	68	57	41	35
Prevention Practices				
Crop acres cultivated for weed control.....	8	5	58	65
Equipment & implements cleaned after field work to reduce spread of pests	52	67	53	70
Field edges, ditches, or fence lines were chopped, sprayed, mowed, plowed, or burned.....	37	47	67	61
No-till or minimum till used	19	30	24	27
Plowed down crop residue using conventional tillage	23	39	62	73
Water management practices used	22	8	46	34
Suppression Practices				
Beneficial organisms applied or released	0	0	5	6
Biological pesticides applied.....	4	1	17	9
Floral lures, attractants, repellants, pheromone traps, or biological pest controls used	1	1	10	8
Ground covers, mulches, or other physical barriers maintained.....	13	24	49	44
Pesticides with different mechanisms of actions to keep pest from becoming resistant to pesticides	31	23	51	29
Scouting data compared to published information to assist decisions	83	22	37	21
Trap crop grown to manage insects.....	0	0	6	5

(Z) Less than half the rounding unit.

¹ The 19 program states in the 2016 Vegetable Chemical Use Survey were Arizona, California, Florida, Georgia, Illinois, Indiana, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Washington, and Wisconsin.

² The 16 program states in the 2018 Vegetable Chemical Use Survey were Florida, Georgia, Illinois, Indiana, Michigan, Minnesota, New Jersey, New York, North Carolina, Ohio, Oregon, Pennsylvania, South Carolina, Texas, Washington, and Wisconsin.